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## Letter dated 8 April 2011 from the Permanent Representative of Tajikistan to the United Nations addressed to the Secretary-General

I have the honour to transmit to you herewith the summary report of the side event on the theme "Water challenges and problems for cities", held on 22 March 2011, on the occasion of World Water Day, which was organized by the Permanent Mission of Tajikistan to the United Nations, in collaboration with the Permanent Mission of Germany to the United Nations, the United Nations Human Settlements Programme (UN-Habitat), the World Water Assessment Programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization of the United Nations (FAO) and South-South News (see annex).

I should be grateful if you would have the present letter and its annex circulated as a document of the sixty-fifth session of the General Assembly, under agenda item 20.

(*Signed*) Sirodjidin **Aslov**
Ambassador
Permanent Representative

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## Annex to the letter dated 8 April 2011 from the Permanent Representative of Tajikistan to the United Nations addressed to the Secretary-General

## Summary report on the side event entitled "Water challenges and problems for cities", on the occasion of World Water Day, 22 March 2011

On the occasion of World Water Day 2011, an interactive session comprised of two panel discussions, followed by a question and answer period, was organized by the Permanent Mission of Tajikistan to the United Nations, in collaboration with the Permanent Mission of Germany to the United Nations, the United Nations Human Settlements Programme (UN-Habitat), the World Water Assessment Programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization of the United Nations (FAO) and South-South News. The session entitled, "Water challenges and problems for cities", brought together a wide range of speakers and participants representing Permanent Missions at the United Nations, United Nations programmes and specialized agencies, academia, non-governmental organizations, the private sector and the media.

In his opening remarks, Sirodjidin Aslov, Permanent Representative of Tajikistan to the United Nations, welcomed the speakers and participants to the event. He then noted, that in addition to the global celebration of World Water Day, taking place in Cape Town, South Africa, the Permanent Mission of Tajikistan to the United Nations, in close collaboration with other co-organizers, convened the event as a further opportunity for the exchange of ideas and knowledge on urban water challenges, particularly the impact of rapid growth and the resulting stress on freshwater resources.

Mr. Aslov went on to say that the issue of high water prices had become economically and ecologically unaffordable, calling for comprehensive approaches to tackle the problems posed by the competing demands of water users. Additionally, he stressed the need to ensure that long-term water conservation measures were identified and the sustainable development of cities and public resources was prioritized. Mr. Aslov then discussed the status of the water sector in Tajikistan and outlined five challenges, including:

1. The lack of financial resources to implement water supply projects and programmes in urban and rural areas;

2. Technological challenges in the industrial production of water, control of water quality and water assessment systems;

3. Malfunctions of energy systems owing to shortages of energy sources;

4. Climate change and natural disasters;

5. Demographic factors such as rapid population growth and the development of cities and other settlements.

Mr. Aslov then underscored his Government's commitment to promote international cooperation on water resources through its initiation of the General Assembly resolutions that brought into being the International Year of Freshwater

(2003), followed by the International Decade for Action, "Water for Life", 2005-2015 and the International Year of Water Cooperation (2013), aimed at addressing the human and industrial water demands. He also cited Tajikistan's National Development Strategy, the Programme for Improving Safe Drinking Water (2008-2020) and the Poverty Reduction Strategy Paper. Combined with comprehensive reforms, the successful implementation of the above-cited frameworks and national laws would, according to Mr. Aslov, enable the Government to increase its population's access to safe drinking water by 90 per cent. In concluding his remarks, Mr. Aslov stressed the need to attract direct international investment and multilateral cooperation at the national, regional and international levels.

Joseph Deiss, President of the General Assembly, in his remarks expressed his appreciation to the Permanent Mission of Tajikistan and co-organizers for holding a New York-based event that enabled discussion and exchange of ideas on water challenges within the urban context. He made reference to the multifaceted nature of water, including the provision of landscape, natural and renewable sources of energy, and transportation to aid the development of the private and commercial fabric of cities. Globally, communities had long formed around and benefited from lakes, streams, rivers and oceans, he said. He pointed out, however, that water could also be destructive, as recently witnessed by the tragic examples of the tsunami in Japan, floods in Pakistan and mudslides in Brazil. Emphasizing that water was first and foremost generous and at the origin of life, he alluded to the fact that a society's well-being and economic growth depended to some extent on the condition of the water system while its citizens relied on freshwater for daily survival.

Mr. Deiss went on to point out that the combined challenges of climate change, rapid population growth, urbanization and industrialization were putting increased stress on the availability and quality of water, noting that globally more than 1 billion people today lacked access to safe drinking water and basic sanitation.

He asserted that in many countries increased efforts were thus required to meet the Millennium Development Goals targets on environmental sustainability. Moreover, he continued, diseases such as cholera and diarrhoea, which were closely associated with contaminated water and poor sanitation, although easily preventable, still caused far too many deaths. In that regard, the availability of water to meet the multifaceted needs of societies was crucial. He further expressed concern that transboundary competition and conflict over water was all too common, highlighting the importance of not adding the issue of water shortages to the myriad existing causes of conflict.

He went on to state that the International Decade for Action, "Water for Life", 2005-2015 demonstrated the political will of Member States to translate their collective recognition of the importance of water into action, particularly action to achieve the internationally agreed water-related goals, including the Millennium Development Goals and environmental sustainability. He thus welcomed the focus of today's discussion on the role of cities to promote the conservation, protection and sustainable management of water. Recalling the recently held thematic debate on disaster risk reduction in the General Assembly, where the challenges of preventing and managing risks in cities were specifically discussed, he said that some of the conclusions of that session would usefully feed into the event's discussions.

In his concluding remarks, Mr. Deiss cautioned that, with half of world's population now living in cities, combined with the pace of urbanization, the relationship between cities and water was now even more crucial, arguing that it was difficult to imagine the future of cities without water or unclean water. In highlighting the "paradox of diamonds and water" of Adam Smith, the founding father of economics, in which water is extremely useful and at the same time, free and readily available, Mr. Deiss pointed out that times had now changed, stressing that strategies were required to better preserve and manage this now priceless resource. Mr. Deiss closed by stating that the debate generated today through the event would help to raise awareness on the urgency of the challenges discussed, and encouraged participants to share their respective experiences and best practices with a view to creatively and effectively addressing the interrelated nature of water and cities.

Christopher Williams, Director of the UN-Habitat Office in New York, recalled events that were held earlier around the world to commemorate World Water Day 2011, including the global celebrations in Cape Town, South Africa, that featured simultaneous video links in the various regions. He explained that in addition to this event, the United Nations Development Programme and the countries of the Green Group had also held events in New York. He especially highlighted the webcast held earlier in the day in Washington, D.C., that featured the signing of a memorandum of understanding between the World Bank and the United States of America at which Secretary of State Hillary Clinton and Robert Zoellick, President of the World Bank, pledged to make more coordinated efforts and investment in the water sector. The Washington, D.C., video link, he told the session, also linked in a panel discussion from Cape Town with Willem-Alexander, Prince of Orange, Joan Clos, Executive Director of UN-Habitat, Edna Molewa, Minister of Water and Environmental Affairs of the Government of South Africa, together with colleagues in the United States in Washington, D.C.

Underscoring the increased use of high-level international institutions to catalyse United Nations global observances to put forward initiatives, he welcomed the emphasis being placed on water and cities. Mr. Williams highlighted the twin challenge of urbanization, namely increased demand and provision of quality water supply. The balance between the two in urban areas, he said, was at most times inappropriate. He added that UN-Habitat findings with respect to housing and rapid urbanization placed emphasis on the need for well-thought-out strategies that took into account economic growth.

While alluding to the fact that rapid urbanization from rural to urban in the absence of manufacturing and job opportunities creates vast demands on cities for employment and basic services, especially water, Mr. Williams emphasized, however, that there were some potential benefits of urbanization relevant to water. As examples he cited (1) the economy of scale achieved in reaching a larger number of people in urban areas relative to sparsely populated or rural areas; and (2) taking advantage of water as an investment on health. The improvement of water quality in cities had enormous implications on health, the prevalence of water-borne diseases and urban agriculture for improved water quality and food production. Recalling Dr. Clos' remarks in Cape Town on the occasion of World Water Day, Mr. Williams pointed out that the challenges ahead for cities regarding water revolved around urban planning. Better planned cities, in particular those with streets and public spaces, provide enormous opportunity for water delivery systems. Cities that

planned in advance, at scale and in stages, were better positioned to provide for water delivery systems that could anticipate and effectively address the impact of growth.

Andreas Pfaffernoschke, Counsellor, Permanent Mission of Germany to the United Nations, in his presentation highlighted the focus of current talks in New York closely related to water on the Rio+20 Conference and the green economy, where water played a relevant role and for sustainable development, reflecting on the relevance of water for increased populations in cities and mega-cities. Outlining the pressing global challenges such as the availability of freshwater and sanitation, and the allocation competition, he stressed that the availability of water resources in sufficient quality and quantity was often a major bottleneck for development. He then emphasized that tradeoffs of competing water users for food production, energy, drinking water supply and ecosystems increasingly posed difficulties in resource allocation and planning, adding that the problem would continue to be compounded by climate change, population growth and urbanization. Pointing out the current 40 per cent gap in global water supply, the Counsellor told participants that if current trends of water consumption continued, by 2030 two thirds of the world's population would live in areas experiencing high water stress. Sanitation would also become increasingly difficult.

Cities, he said, required the transport of significant volumes of water from rural to urban areas with water leakage being a major concern. Because cities typically had food demands that outstripped production in surrounding areas and relied on energy sources beyond their boundaries, the Counsellor envisaged a risk of increased future stress on water, food and energy resources. He added that given the trends towards urbanization, especially in sub-Sahara Africa, where the urban population would double during the period 2010-2050, cities were becoming major consumers of all resources. On the other hand, cities were catalysts of innovation and centres of economic activities and development. Cities, he said, also benefited from the concentration of diverse skills, research institutions and service providers that contributed to the scale of innovation. He emphasized the relevance of the nexus of water, food and energy, particularly in urban areas, adding that the sustainable use of water resources was an important ingredient and key for the green economy. Meeting today's nexus challenges required solutions that took into account all three pillars, with particular emphasis to cities.

In closing, the Counsellor reminded participants that the Government of Germany would launch a multilateral stakeholder engagement process for the Bonn 2011 conference on the theme, "The water, energy and food security nexus — water resources in the green economy". The conference, planned to take place in Bonn from 16 to 18 November 2011, would bring together Governments and stakeholders in a high-level set of discussions that aim to position water within the framework of the green economy. He also mentioned the World Water Forum that would take place in Marseilles, France, in March 2012, within the context of French-German cooperation.

Lila Hanitra Ratsifandrihamanana, Director, FAO Liaison Office in New York, focused on innovations in water management needed to sustain cities, with an emphasis on water use and reuse for agriculture in urban and peri-urban agriculture. Highlighting FAO support to water management, she spoke about the development of AquaStat, a global information system used to monitor water and agriculture

water use in member countries. She also highlighted a 2010 FAO film, *Foods for Cities*, which showcased water quality issues in some countries. Rapid urbanization was occurring simultaneously with recurrent challenges such as unemployment, food insecurity and malnutrition. With that growth also came increased demand for water for both private and commercial operations.

Growth in urban and peri-urban agriculture had led to a heightened demand for irrigation water, resulting in scarcity that was often aggravated by insufficient sanitation coverage, with higher exposure to containments. Those pressures on urban water supplies required the use of non-conventional alternatives to create more resilient cities, she stressed. Rainwater harvesting in cities, which held great potential for urban agriculture, remained untapped. Good agricultural and forestry practices could also contribute to sound watershed management, safeguarding water catchments and reducing runoff and flooding in cities. She then introduced wastewater reuse in urban areas as one of the more non-conventional alternatives that showed great potential for urban environments in the light of water shortages in irrigation water in and around cities, combined with the growing interest in urban farming. Cleaning the water used in cities for reuse for urban agriculture in urban and peri-urban areas reduced water scarcity and freed up resources for food producers. The reuse of wastewater served the innate function of agriculture while recycling an urban waste product. Moreover, FAO had supported irrigation programmes for commercial market gardens in urban areas, microgardens in slum areas and green rooftops in densely populated city centres for low-income city farmers.

Her agency, she said, was also promoting programmes on growing green cities, especially urban and peri-urban agriculture that supported a wide range of crops within cities and towns in addition to programmes that enhanced access to affordable technologies such as irrigation through better control of drainage systems and conservation approaches that minimized soil erosion. She then identified the benefits of urban and peri-urban agriculture to food production for urban areas, employment and income generation, the promotion of green cities and the environment. She noted however that, in addition to containing significant amounts of nutrients for crop production that reduced the need for chemical fertilizers, urban and peri-urban agriculture also posed major health risks for producers and consumers in the form of pathogens. The Director then pointed out that the FAO/World Health Organization (WHO) guidelines for the safe use of wastewater had been developed to minimize health risks.

Lastly, having given examples of sustainable urban agriculture in Africa, South Asia and Latin America, she articulated the need for a move from a linear to circular approach to water use (cleaning water used in cities and reusing it in agriculture). This was a win-win situation, she explained, since cities were providing water and nutrients and organic matter to agriculture, while agriculture was providing food, employment and income to cities and improving the landscape.

Engin Koncagul, Senior Programme Officer from the World Water Assessment Programme/UNESCO shared some of the findings of *The United Nations World Water Development Report* series on water-related urban challenges. The World Water Assessment Programme, he said, united 27 United Nations system agencies and general stakeholders to monitor and assess the state of the world's freshwater resources and ecosystems and to provide recommendations, develop case studies,

enhance assessment capacity at the national level and inform decision-making processes. He stated that with 50 per cent of the world urbanized and the population of least developed countries growing at a faster rate than others, increasing population and rapid urbanization translated into fierce competition for freshwater resources. He echoed earlier statements by stating that 47 per cent of the world's population would live in areas of high water stress by 2030.

To cope with water stress, he continued, there were supply and demand side measures. Then, making reference to a water savings campaign in Turkey that resulted in a significant saving of water resources, he stressed that simple measures taken at the household level could produce solid and meaningful results. The principal challenge lay not in the hardware or technological component of water supply but in the soft components such as awareness-raising, commitment and leadership. With growing populations, cities brought opportunities, but at the same time they were major sources of pollution. Consequently, integrated water management was important for maximizing benefits of water use while limiting pollution and associated health risks, he stressed. He then concluded by summarizing the key challenges of urban water resource management as those listed below and called for concerted efforts as a response:

- Growing slum population and associated health risks in slum settlements due to the lack or low rate of access to safe drinking water, sanitation and medical services
- Affordability of water vis-à-vis low- and high-income households
- Socio-economic costs associated with the increasing number of water-related disasters
- The impact of climate change and rising sea levels on coastal settlements and the high cost of adaptation as a heavy financial burden for developing countries

Paul Edward, Senior Adviser, Water Sanitation and Hygiene (WASH), United Nations Children's Fund (UNICEF), focused on the challenges of monitoring progress towards achievement of the Millennium Development Goals targets for water supply and sanitation, particularly in urban areas. He mentioned the WHO/UNICEF annual report on the Joint Monitoring Programme for Water Supply and Sanitation that presented comparative data on the proportion of people in the urban and rural settings, respectively, using improved sanitation and improved drinking water sources. Stating that the situation was worse in rural than urban areas, he said that globally 7 out of 10 people without improved sanitation and 84 per cent of the global population without improved drinking water lived in rural areas. He stressed, however, that global figures also showed an underlying problem of progress in urban areas being undermined by increased population growth. Open defecation was on the rise in urban areas, he said, while there had also been a marked increase of shared facilities in urban areas.

While noting that the overall picture was better in urban areas, Mr. Edwards pointed out that challenges were emerging. Moreover, global figures available masked significant disparities within low-, middle- and high-income urban areas, especially when the data was not disaggregated between the different classifications of urban, which could have varied definitions. This affected the way progress was viewed. Although urban areas saw a greater use of piped water, the existence of

infrastructure did not reflect the level of water supplies enjoyed per household. He further stated that the assumption that improved facilities meant access to safe drinking water and sanitation was not valid because in urban areas facilities were usually contaminated while continued access to water might be limited. Recognizing the monitoring challenges in generating a true picture of urban areas, Mr. Edwards said that the Joint Monitoring Programme was working to strengthen monitoring systems by incorporating surveys that were more specific to the urban environment, applying non-survey data to supplement the Programme's efforts and partnering with countries that were piloting new approaches in order to present a more detailed picture of the urban situation towards 2015.

Francis Lorenzo, President of South-South News, recognized the leadership role of Tajikistan on water issues as reflected through their work on the different resolutions adopted on water at the United Nations. He also thanked UN-Habitat and other co-organizers for support to South-South News, and the Permanent Missions and other international bodies on issues related to water. He then elaborated on the importance of access to water to achieve the Millennium Development Goals and the negative effect on health, sanitation and all spheres of development. Access to water was central to achieving the Goals and ensuring sustainable and equitable access to water required addressing water availability in extreme situations through proper water management, and providing adequate sanitation and wastewater services.

Mr. Lorenzo also pointed out that policies and action on the availability of water and access to sanitation were essential for lifting people out of poverty, ensuring food and water security and contributing to sustainable development. Political will and financial commitment should come from national development partners and be further strengthened and granted high priority to ensure achievement of the international water-related targets for developing countries, as elaborated in the Dushanbe Declaration on Water. South-south and triangular initiatives for water management should consider the diverse realities involved in each case. Therefore, cooperation should be fostered through traditional financial means and broader approaches by promoting exchange of experiences, best practices, lessons learned and sharing of appropriate environmental sound technology and know-how. In that context, he told the audience that South-South News had been present and had facilitated in-depth coverage of the High-level Conference on the Midterm Review of the International Decade for Action, "Water for Life", 2005-2015 (Dushanbe, 2010), the sixteenth session of the Conference of the Parties to the Convention on Climate Change (Cancun, 2011) and at the High-level Conference on Media and Climate Change (Nairobi, 2010). Finally, he recognized the important role of the media in promoting public awareness and accurate information on climate change. He drew attention to the power of media to raise awareness at the global level. Mr. Lorenzo then previewed a video produced by South-South News on south-south and triangular cooperation on water.

Adnan Altay Altinörs, Permanent Mission of Turkey to the United Nations, addressed the session on the role of local authorities in providing access to basic services to human settlements. Municipalities, he said, were the main providers of water in urban areas. However, they lacked the strengthened capacities and adequate resources required to carry out their responsibilities. Stating that the Fifth World Water Forum (Istanbul, 2009) had placed special emphasis on local authorities, Mr. Altinörs called attention to the signing of the Istanbul Water Consensus for

Local and Regional Authorities, signed by 43 mayors and local leaders in 2009. Stating that the Istanbul Water Consensus provided a basis for the elaboration of urban water issues, with a view to creating more resilient cities, the speaker highlighted aspects of the consensus enumerated below:

1. Access to good quality water and sanitation is a basic right for all human beings and plays an essential role in life and livelihoods, the preservation of the health of the population and the fight against poverty;

2. Water is a public good and should therefore be under strict public control, independently of whether the services are delegated to the private sector or not;

3. Sanitation is equally important as water supply and needs to be given due consideration on the political agenda of local, regional and national governments;

4. Slums and informal settlements in and around cities are growing and poverty is increasingly an urban issue, requiring the linkage between access to water and sanitation and land tenure to be urgently addressed;

5. The nature, extent and dynamics of water problems show commonalities and differences when comparing the situations in developing and developed countries. While insufficient or ageing infrastructure is a challenge for both, financing, strengthening capacity and improving legal frameworks are core concerns, particularly in developing countries.

Local leaders in Istanbul also committed to:

1. Making assessment of the internal and external pressures on the local water resources;

2. Adapting their water infrastructure and services to emerging challenges, such as climate change;

3. Speeding up the implementation of commitments made on access to water as described in the internationally agreed development goals.

In concluding, he said water deserves high priority at all levels and efforts should be scaled up to meet the internationally agreed development goals, including the Millennium Development Goals.

In her remarks, Christine Alfsen, speaking on behalf of UNESCO, reiterated that many urban areas had been founded along the banks of great rivers, or in areas of freshwater seepage, where groundwater was (or increasingly was) close to the surface, and further said that there was thus a close cultural connection between urban settlements and water systems (wetlands, rivers, lakes, oceans and seas). She highlighted that water challenges in urban areas (pollution, depletion and access, floods, droughts, natural disasters, public health) were multifaceted, interconnected and manifested themselves at many spatial, temporal and jurisdictional scales. Ms. Alfsen then cited Cambodia's complex hydrological system linking the Mekong tributary, including the Tonle Sap river and lake, the remnants of the Angkor empire, with Phnom Penh, Cambodia's capital city, as a vivid illustration of these interdependencies across spatial and temporal scales.

She also said that current global water problems in the cities should not be looked at in isolation. They were a symptom of a complex and interconnected

challenge, namely, the increasing human pressures on scarce natural resources and linked social and ecological systems in a context of climate change. Ms. Alfsen pointed out that unsustainable patterns of resource use, including water, were not the fault of cities. She emphasized that inequity and lack of access to clean water and sanitation was at the core of many of the water challenges in cities. People and their consumption patterns and lifestyles which differed widely based on purchasing power were the ones responsible for water extraction, usage and wastage. The average resident of Indonesia, with a $3,900 gross domestic product (GDP) per capita used 28.9 cubic metres per person per year, while the average resident of Canada with a $40,200 GDP per capita used 276.0 cubic metres per person per year. That relationship, she said, was reversed in developing countries but this was a function of income rather than inefficiency. The poor were often set to fail by faulty planning and the lack of adequate governance systems.

Citing the experience of New Orleans, she pointed out that, faced with increasing competition for space and resources in a context of inequitable allocation of resources, the more disadvantaged segments of society often settled on ecologically valuable and vulnerable areas such as floodplains, wetlands and disaster-prone areas where they further aggravated pressures on ecosystems. Urban growth, provided it was managed well and for the benefit of all, would be a big part of the solution. Urban dwellers tended to have a lesser ecological and carbon footprint per capita than their rural counterparts. Another overall consequence of urbanization was lower fertility, which in turn could over time decrease human pressures on resources (Montgomery and others, 2003).

Cities were the source of innovation, research and development and also concentrated human and financial resources. By being often the centres of political power, there was also an incentive to find solutions to complex problems which would remain unnoticed elsewhere. She presented the Catskill/Delaware drinking water supply system, which supplied 1.3 billion gallons of unfiltered water per day to 9 million people in New York City, as an illustration of that phenomenon. Ms. Alfsen also underscored that there was a need to go beyond the conventional approach to management of water by adopting an ecosystem approach to water management. The conventional approach to water management which dealt with water as a commodity and services for consumers did not integrate the fact that access to clean and healthy water was dependent on the health and functions of ecosystems far and near (Bridgewater, 2011). Promoting the rational use of water resources for development and environmental protection in urban areas required action beyond municipal boundaries as individual municipalities did not control human activities at the river (lake or aquifer) basin scale. This, she continued, required multiple forms of collaboration and incentives at a landscape/watershed levels as reflected in the Istanbul experience with the Omerli Watershed.

She said that the urban landscape scale was one that facilitated collaboration across scales, sectors and interests, interdisciplinary and systems thinking as well as adaptive management solutions. As such, it suggested that many of the world's seemingly intractable problems such as how to secure access to water for a planet with 9 billion people could be resolved when dealt with at a different scale. Knowledge, awareness, innovation, sources of finance and technology as well as political will and adaptive governance systems were often present in cities even when they were lacking at the national level. As an example of such collaboration, she mentioned the success of the Mayor of Mexico City in urging the mayors of 138

cities, ahead of the Cancun Conference, to commit their governments to reducing greenhouse gas emissions, while national policymakers were still struggling with reaching an agreement.

Placing further emphasis on cooperation, Ms. Alfsen presented the "urban biosphere" (URBIS): a planning and sustainable management concept that sought to integrate conservation, education and research with sustainable practices at the relevant scale in the urban landscape. That approach, she said, was being promoted and tested by a coalition of partners from the International Union for Conservation of Nature, the Local Governments for Sustainability Local Action for Biodiversity Programme, the Stockholm Resilience Centre, UNESCO and the United Nations University. It provides the necessary arena for collaboration between municipalities, ensures that science and public awareness drive decision-making and that education is used to mainstream best management practices. It also promotes holistic understanding of water and other natural resources and promotes adaptive management integrating equity of access to land and resources.

In concluding Ms. Alfsen pointed out that many of the solutions to urban water challenges lay squarely in better, adaptive governance of linked social and ecological systems at a scale allowing for ecological, economic and social issues to be dealt with simultaneously and in an integrated fashion. Many urban regions were now implementing policies in that direction as the stakes were high and the consequences of inaction were often unacceptable. As we moved towards the Rio+20 Summit in search of global sustainability solutions, she emphasized that it would be wise to incorporate the experience and track record of urban regions in addressing water and other related challenges.

Mayor Douglas H. Palmer, Palmer & Associates LL, focused on preparedness for water emergencies in urban settings. Speaking from the United States national experience, his emphasis lay on the ability of cities to put into place preparedness strategies in advance of emergency situations, rather than reacting as those situations occurred. Mayor Douglas also raised pertinent questions regarding urban responses in situations where clean drinking water was not available. He stressed that putting into place coordinated and comprehensive water plans that ensured sustainable responses to emergency and mitigate urban risks on private, public and commercial fronts was essential.

As the United Nations drew attention to water issues, he said that United States mayors had also been fervently working on the same issues for many years. In addition, he underscored the importance placed by the United States Conference of Mayors and the Mayors Water Council on water as a resource for populations, economic development and sustainability. By highlighting his collaboration with Pure Safe Water Systems, Inc., to develop mobile emergency response systems that could purify and deliver water on location in areas as remote as Haiti or as populated as Trenton, New Jersey, he called for frameworks that would put pressure on the private sector to come up with means of distilling water and making it available in times of emergency. Lastly, highlighting the ageing infrastructure in the United States, Mayor Palmer emphasized the need to synchronize long-term conservation efforts with investment in urban infrastructure and the need for a coordinated plan for water systems to provide sustainable pure drinking water when it was most required.

Complementing Mayor Palmer's intervention, Gerard R. Stoehr, Chief Operating Officer of Pure Safe Water Systems, Inc., focused on planning for disaster situations, primarily, longer-term planning for short-term events. His presentation focused on planning for everyday as well as catastrophic events, as identified by the United States Conference of Mayors. Most lacking, he said, was the know-how on planning for and responding to disaster. Headlines of recent disasters globally, he stressed, pointed to a lack of preparedness and the need for longer-term planning. Poor planning had economic and social impact on all sectors of life. Therefore, he called for a move from concern to action and added a focus on longer-term issues in water management planning. Furthermore, available data in the United States, among other things, demonstrated that a higher percentage of funding in water authorities was allocated to daily maintenance and operation. Infrastructure, major repairs and replacements were also highlighted. In addition, the data showed that often responsibility for emergency planning and budgeting was shifted between authorities. Therefore, as an action item, emergency water response planning needed to be part of every first response mechanism in urban areas.

He also outlined key criteria for an effective water emergency responsive system for consideration, including:

1. Ability to source water without needing to first identify contaminants;

2. Mobile system that is easily deployed in multiple locations;

3. Going beyond purification methods and integrating distribution;

4. Linking emergency response systems to systems within a city's emergency plan.

He then presented a video entitled, *When Disaster strikes, will you be ready*, that highlighted the impact of emergency water situations and the effectiveness of the Pure Safe Water System as a first response.

During a question and answer session, representatives of delegations thanked the Permanent Mission of Tajikistan for bringing forth the topic of water and urbanization. The representative of Brazil recalled international consensus on the importance of safe drinking water and underscored the link with human rights. Capacity-building, exchange of best practices were cited as important to the preparation for Rio+20 Conference. The United States delegation thanked speakers for making reference to the initiative taken by Secretary of State Clinton on the occasion of World Water Day 2011. The United States was a committed partner to access global water issues and saw water as a top foreign policy issue, as highlighted by the signing of the memorandum of understanding between the United States and the World Bank. The representative of Bangladesh asked how Member States could have access to finance to build water plants to meet the needs of their growing populations.

Commenting on the progress made in monitoring the internationally agreed development goals, Ricardo Martinez of the Statistics Division of the Department of Economic and Social Affairs informed the session that the United Nations Statistical Commission had adopted a framework of systems of economic and environmental accounts for organizing information collected for environmental and economic issues. He also mentioned that the Commission had adopted the indicator for water and, more recently, the Commission had adopted the International Recommendation

for Water Statistics. Mr. Martinez concluded by stating that there was a need to build bridges between the water and statistics world for better monitoring and assessment. In addition, several representatives of civil society took the floor. Fatima Rodrigo of the International Presentation Association asked about long-term development plans for rural areas to reduce migration to urban areas. Also representing the civil society, Mr. Morwitz of Global Scholarly Publications, asked whether there were plans to establish a forum to handle disputes between lower and upper stream water users. Finally, the Queen Mother, Community Mayor of Harlem and Goodwill Ambassador for Africa, Delois Blakely, asked who decided on the allocation of water and financial resources.

To conclude, Mr. Williams summed up the common themes and outcomes of the discussion in 10 key points, listed below:

- Emphasis on a systems approach within the water sector is key
- Regional or beyond the city approach that integrates the broader political and water supply dimensions in rural, urban and surrounding basins areas
- The critical decision-making role of local authorities in relation to safe drinking solutions and cities, particularly in emergency situations
- Ageing infrastructure, specific to developed countries, and the investment required for improvement
- Disaster prevention, preparedness and risk reduction for the global North and South
- The key role of media, with particular emphasis on south-south and triangular communications and technology transfer and exchange of best practices
- The importance of monitoring statistics and data and the need for more work on capturing the urban dimension on water issues in terms of quality and sanitation
- Addressing rural-urban distinctions to highlight linkages, opportunities and constraints as the world moves to urban areas. Balanced territorial development approaches that address rural and urban dimensions and linkages of water
- Reuse of urban water for urban agriculture and the needs of water that are not for drinking. Looking on how best to unpack systems of reuse
- Leadership at all levels indicates water as a priority and central issue for all levels (local and national government, United Nations system agencies, non-governmental organizations and the private sector)

In his closing remarks, Mr. Aslov thanked all present for having attended the event that addressed the urgent water issues faced by urban areas globally. He recalled the varied dimensions of urban challenges and recommendations that had been generated by the discussion. He then advised participants that a summary report of the session would be prepared for circulation among participants. His closing remarks were followed by the vote of thanks by Felix Matos Rodriguez, President of Hostos Community College, New York.